

IN THE CLAIMS:

Cancel all of the previously pending claims (Claims 1-20).

Add the following new claims:

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Claim 21. (new): A prefabricated, rectangular, self-supporting, radiating panel (P) having two opposite long sides and two opposite short sides and having a sandwich structure formed by at least a layer of plasterboard (1) and a layer of heat-insulating material (2), said plasterboard layer (1) incorporating, internally, pipes (3) for a working fluid, end portions of said pipes emerging from a side of the panel, said plasterboard layer (1) comprising a plurality of continuous pipes (3) each housed in cavities arranged in a coiled outline on one side and in adjacent modular zones (6) of the panel and forming an independent hydraulic circuit, said zones (6) being rectangular and having two opposite short sides and two opposite long sides parallel to said short sides of said panel, said zones (6) being separable from one another so as to provide panel parts of different sizes.

Claim 22. (new): A radiating panel as claimed in claim 21, wherein said end portions (4) of each of said independent hydraulic circuits emerge laterally from the panel (P) along a said long side of the panel.

Claim 23. (new): A radiating panel as in claim 21,
wherein said zones (6) have all the same area and house all the
same length of said pipe (3).

Claim 24. (new): A radiating panel as claimed in claim
21, wherein lines (L) separating adjacent said zones are visible
on an external surface of the panel (P).

Claim 25. (new): A radiating panel as claimed in claim
23, wherein the width of the heat insulating layer (2) of the
panel is less than the width of the plasterboard (1) by an amount
sufficient to allow said end portions (4) to emerge freely from
the plasterboard layer (1) and allow direct fixing of the
plasterboard panel (P) to supporting sections (9, 10).

Claim 26. (new): A radiating panel as claimed in claim
22, comprising moreover two top and bottom end zones (5), which
are devoid of pipes (3) and insulating layer (2), for housing
lines (11) supplying a thermal carrier fluid to the panel (P).

Claim 27. (new) A radiating panel as claimed in claim
22, wherein said pipe (3) is a pipe made of plastic material.

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Claim 28. (new) A radiating panel as claimed in claim 22, wherein said pipe (3) is a pipe made of metallic material.

Claim 29. (new): A radiating panel as claimed in claim 21, wherein said layers (1, 2) of the panel are fixed together by means of gluing.

Claim 30. (new): A method for manufacturing a radiating panel comprising, during manufacture, the steps in succession of:

- a) milling one or more cavities (7) on one side of a plasterboard panel (1);
- b) inserting pipes (3) into said cavities (7); and
- c) gluing directly onto the plasterboard on the abovementioned side of the panel a layer (2) of heat insulating material.

Claim 31. (new): A method as claimed in claim 30, which further comprises, during manufacture, the following steps:

- a1) forming said cavities (7) with a coiled arrangement, two ends of each coiled cavity opening at one and the same side of the panel (P);
- b1) forming said pipes (3) as only one continuous pipe, said continuous pipe emerging from said side of the panel, as a

free end at the bottom and the top of the panel and as a loop at
the boundary between adjacent coiled cavities;

d) sealing said continuous pipe (3) inside said cavity
using a heat-conducting sealing material.

Claim 32. (new): A method as claimed in claim 31, which
further comprises the step of:

e) cutting said continuous pipe (3) at the loops
thereof connecting adjacent coiled cavities.

Claim 33. (new): A method for manufacturing a radiating
panel, comprising the steps of:

a) forming a plasterboard panel by inserting inside a
gypsum core thereof one or more coiled pipes (3), end portions of
said pipes emerging from one side of said panel; and

b) gluing onto one side of the core a layer (2) of heat
insulating material.

Claim 34. (new): A method for manufacturing a radiating
panel, comprising the steps of:

a) forming a plasterboard panel by inserting inside a
gypsum core of said panel only one continuous pipe (3), formed in
more than one coils, said continuous pipe emerging from one side

of the panel, as a free end at opposite ends of the panel and as
a loop at the boundary between adjacent coils; and

b) gluing onto one side of the panel a layer (2) of
heat insulating material.

Claim 35. (new): A radiating wall formed by a plurality
of panels as claimed in claim 21, wherein said panels (P) are
arranged alongside one another such that pairs of neighboring
panels (P) are adjacent along sides of the panels which do not
have end portions (4) of the pipes (3) and instead are separated
from one another, along sides of the panels provided with the
said end portions (4), by a predetermined distance sufficient to
allow the insertion, between the panels, of secondary headers (8)
which are connected to said end portions (4).

Claim 36. (new): A radiating wall as claimed in claim
35, which is fixed to pre-existing masonry walls or ceilings by
means of interposed metal support sections with a square or U-
shaped cross-section (9) along lines joining together adjacent
panels and metal support sections with an Ω -shaped cross-section
(10) along a strip joining together non-adjacent panels.

Claim 37. (new): A radiating wall as claimed in claim
36, wherein said secondary headers (8) are housed in said metal

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sections with an Ω -shaped cross-section (10), where they are
connected to said end portions (4) of the coiled pipes (3).

Claim 38. (new): A radiating wall as claimed in claim
36, which also comprises main supply lines (11) for supplying
thermal carrier fluid to said secondary headers (8), which are
housed behind the panels (P) along strips 1f of said panels which
do not have said heat insulating layer (5).

Claim 39. (new): A radiating wall as claimed in claim
36, also comprising along said Ω -shaped metal sections, a
plasterboard covering panel (C).

Claim 40. (new): A radiating panel having sandwich
structure formed by a layer of plasterboard, said plasterboard
layer having a sinuous cavity in a side of said plasterboard
layer, a sinuous pipe in said sinuous cavity, the pipe having
ends that extend beyond ends of said sinuous cavity, and a layer
of insulating material directly bonded to said layer of
plasterboard on the same side of same layer of plasterboard as
said sinuous cavity, said layer of insulating material closing
said sinuous cavity.

Applica n No. 09/856,549
Amdt. dated May 27, 2003
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Docket No. 2512-1050

Please charge the fee of \$168 for the addition of
two (2) extra independent claims, added herewith, to Deposit
Account No. 25-0120.